

ART. LXII.—Notes on New Zealand Ichthyology. By JAMES HECTOR, F.L.S.

[Read before the Wellington Philosophical Society, 9th December, 1876.]

BRAMA SQUAMOSA.

Pl. IX.

D. 3-35, A. 2-29.

Toxotes squamosus, Hutton, "Trans. N.Z. Inst.," Vol. VIII., p. 210.

THE type of the above was presented to the Colonial Museum by Mr. W. T. L. Travers, F.L.S., but the second fresh specimen now figured shows that it must be referred to the genus *Brama*, on account of its general oval form and blunt profile; its subulate acute teeth, with a stronger second row in the lower jaw; long dorsal fin extending forwards to over vertical of the pectorals and ventrals, with three short feeble spines confluent with the soft dorsal, which, as also the canal, is enveloped in dense scutæ; its moderate very oblique, almost vertical, gape, and dilated maxillary; deeply-excised caudal fin, with elongate acuminate lobes. The genus *Brama* has been transferred in Dr. Günther's work from the Order *Squamipennes* to the *Scomberidæ*, on account of the number of vertebral segments. As a species this fish differs very little from Ray's Bream (*Brama rayi*, Cuv.)

(a) Dried specimen, Cook Strait, 1875 (Tylor).

(b) Fresh specimen, stuffed, Wellington Harbour, 1875.

Total length, 19 inches.

CYTTUS ABBREVIATUS.

This small fish from the "*Challenger*" collection, ascribed by me in error to the genus *Platystethus*,* should be referred to the genus *Cyttus*, although it differs from the other species of that genus in the possession of bony and spinous plates along the base of the dorsal and anal fins, as in *Zeus*, and in its non-protractile mouth. It will probably form the type of a new genus, but I provisionally place it with *Cyttus* until the "*Challenger*" collection has been published.

UPENEICHTHYS VALMINGII. Cuv. and Vul.

C.M.

Upenoides valmingii, Cuv. Günth., I., 400.

Pl. IX., Fig. 5.

Red Mullet.

D. 1/7-9; A. 1/6; L.L. 29; L.T. 2/6.

Length, $3\frac{2}{3}$ times the height, which equals the length of head. Scales twice the vertical diameter of the eye, which is one-third the length of snout. First dorsal less in length of base than the second by the diameter of the eye. Base of second dorsal, length of pectoral and ventral, all equal to

* "Trans. N.Z. Inst.," Vol. VII., p. 247, Pl. XI., Fig. 31c.

length of head. First dorsal spine less than the diameter of the eye; second equal to length of head. Barbels reach nearly to the vertical from the extremity of the operculum.

Upper part of body dusky dull violet, variegated with yellow and azure blue blending into pale crimson, with golden and azure blue streaks on lower parts of body. Head with blue streaks descending on the snout. Fins brownish-purple, with waved markings of pink, yellow, and azure blue, the latter being distinct and the two former blending into the ground colour. Each scale with a violet patch in the centre. Iris golden yellow. Two silvery streaks and a granulated patch below the eye. No black bands on the side of the body.

Teeth on jaws minute, in a double row, with some slightly stronger teeth in front of upper jaw. No palatine teeth. Vomer with three teeth on each side in distinct patches. (See Fig. 2 a.)

In the colouration, general form, and divided vomerine teeth, this fish is very similar to *Upenoides vlamingii*, but the absence of teeth on the palatine bones places it in Blecker's genus *Upeneichthys*.

Distinguished from *U. porosus*, of the Australian seas, by the absence of a black lateral streak, which is always present in that species according to Count Castleneau ("Ichthyology of Australia," p. 65.)

Specimen in spirit. Outside Wellington Harbour.

Total length, 16 inches.

BERYX AFFINIS.

C.M.

Günther, I., 13 A.

Pl. IX., Fig. 1.* *

D. 7/12; A. 3/12; V. 1/7; L.L. 44; L.T. 6/12.

Height equal to length of head and one-third total length. Operculum with two spines. Pectoral is one-fifth the total length. Eye situated high, its diameter being one-fifth the length of the head, and exceeding that of the snout. Snout with two nasal apertures close in front, the posterior being the larger. Intermaxillaries carry five teeth on the sides, and a group of large teeth on each side of a mesial notch, into which a projecting group of large teeth on the lower jaw fit.

Colour crimson-pink, paler beneath.

A dried specimen. Collected by Mr. Robson at Cape Campbell.

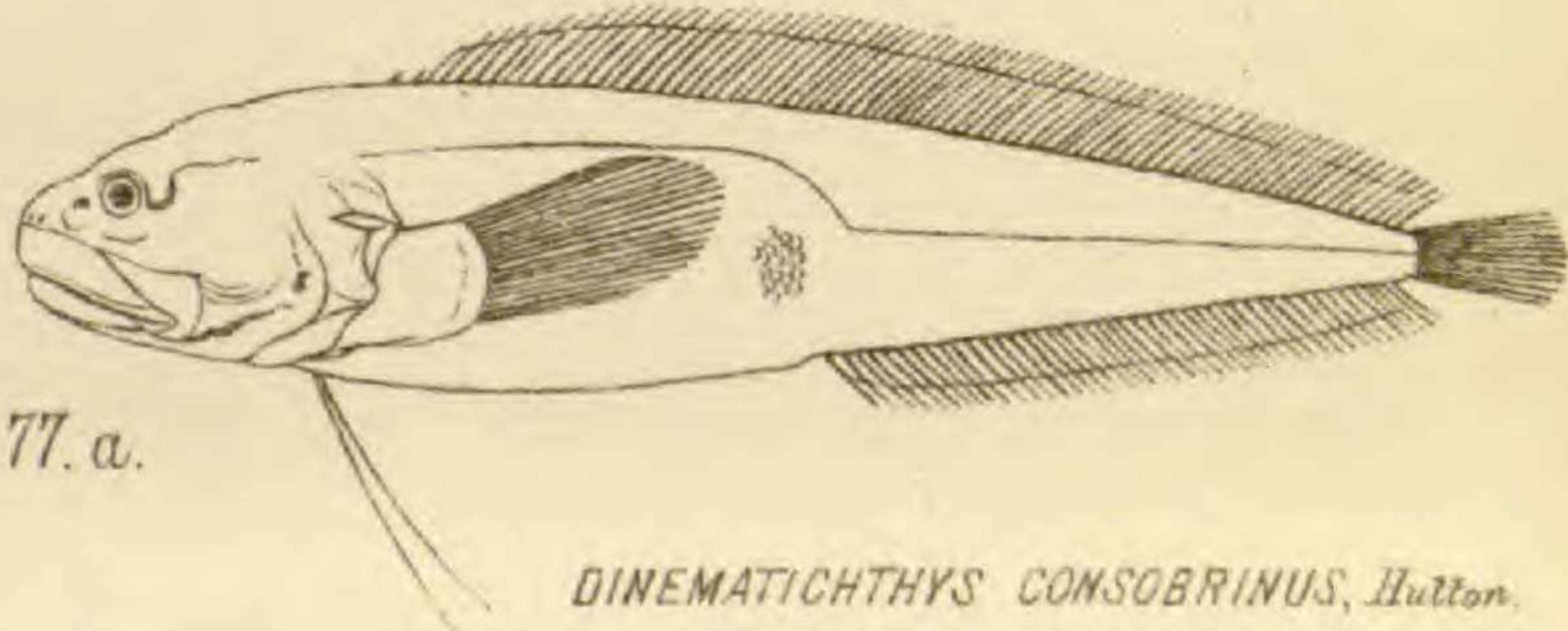
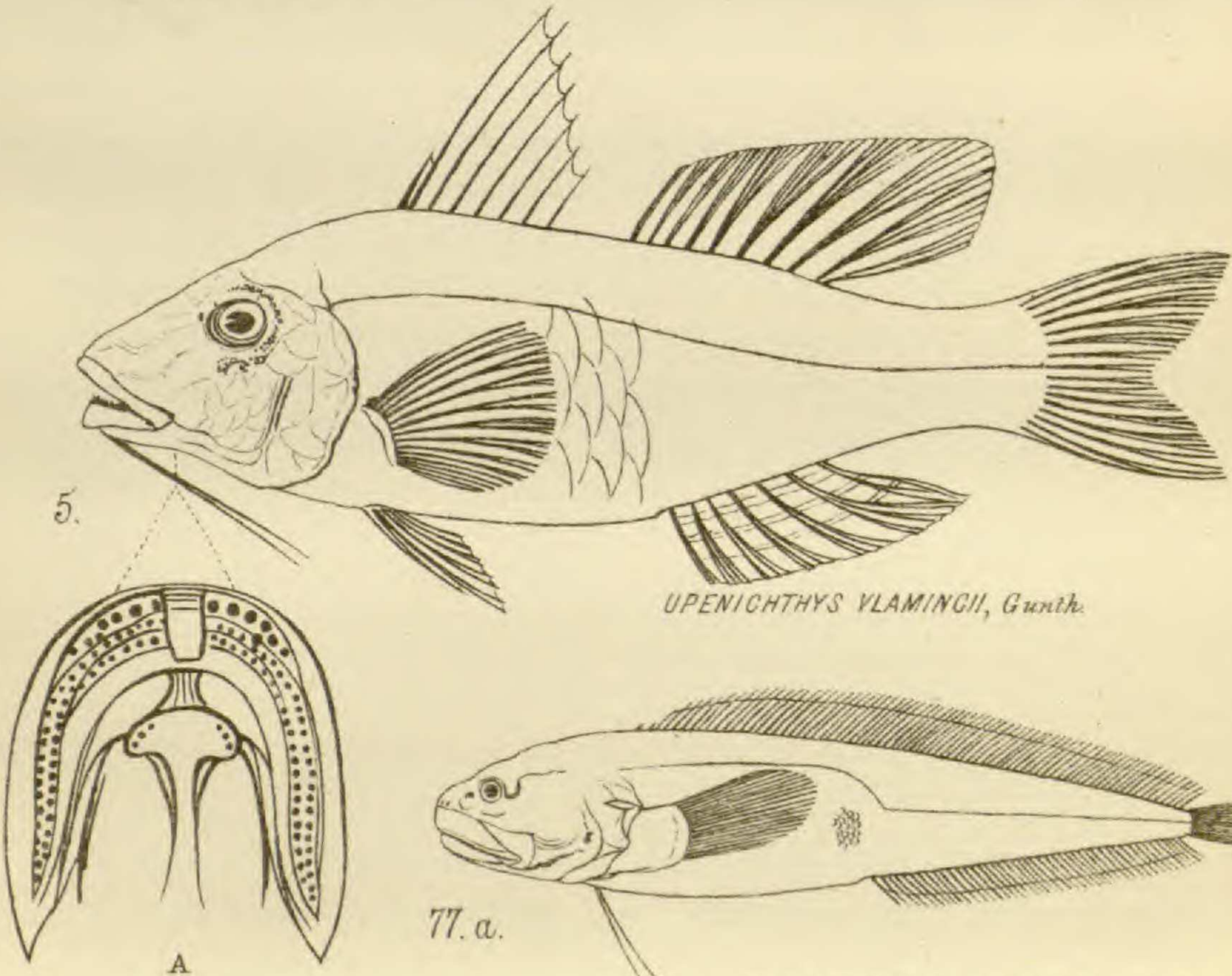
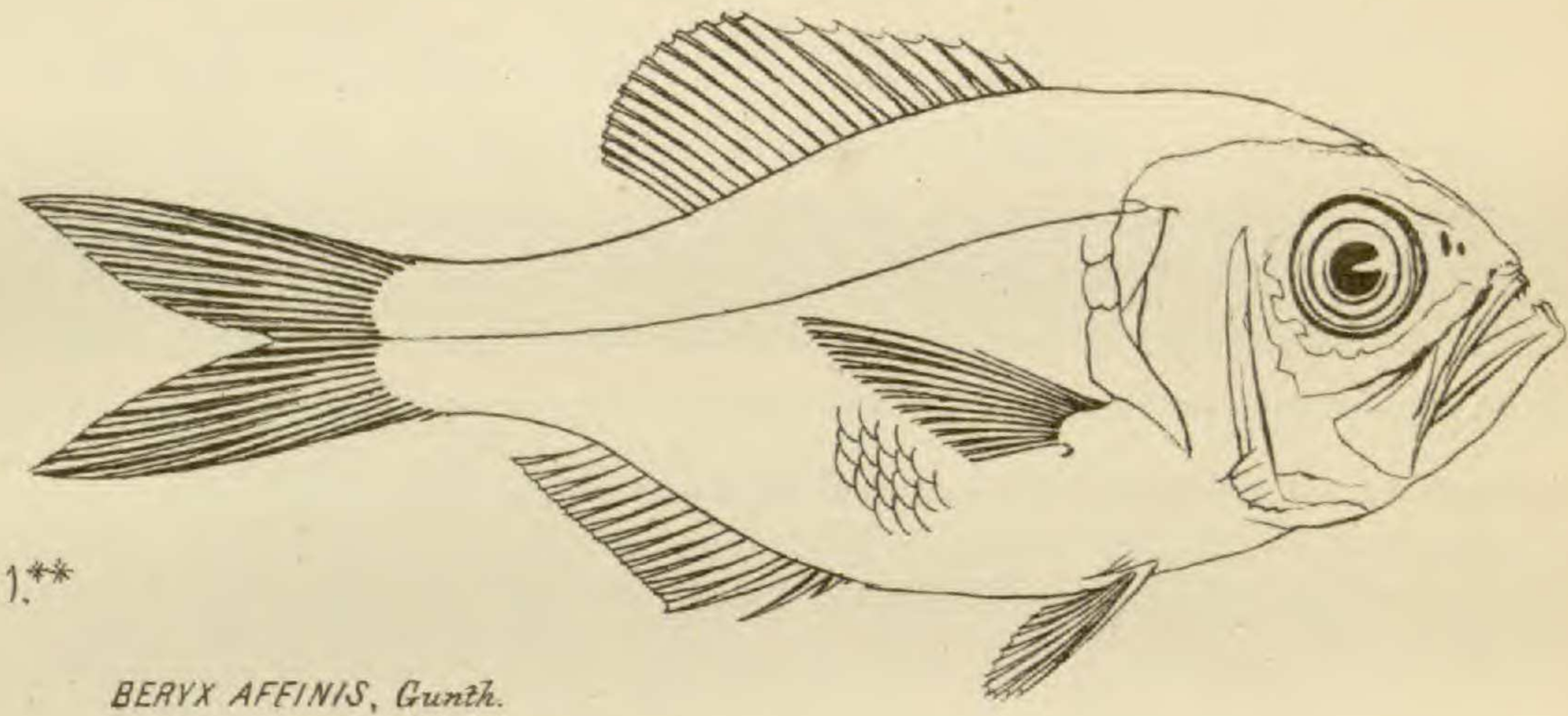
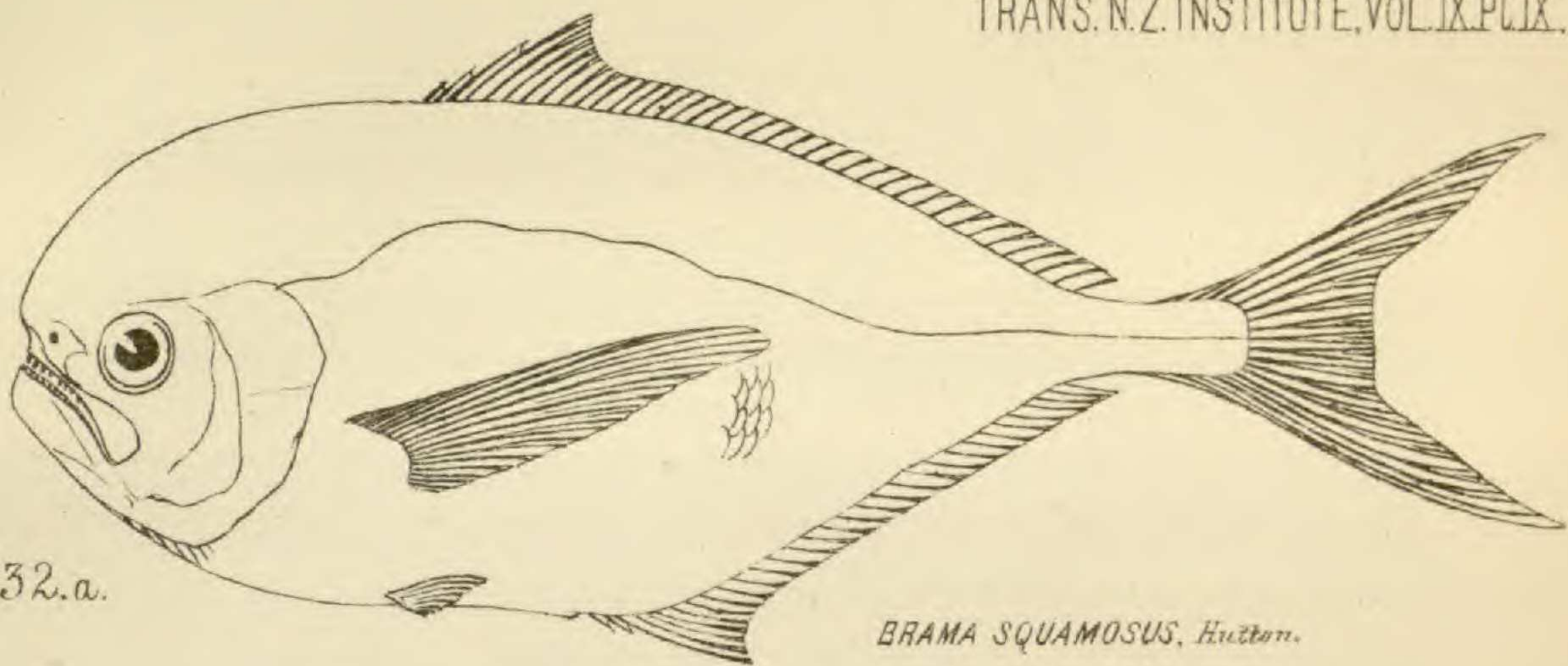
Total length, 18 inches.

This fish agrees with Dr. Günther's species, of which he gives a very minute description in the work above quoted. It inhabits the coast of Australia.

DINEMATICHTHYS CONSOBRINUS, Hutton.

Pl. IX., Fig. 77a.

Captain Hutton's type, being in the Colonial Museum, is figured. He



does not mention the presence of two minute spines in front of the dorsal. If these are present in the other species the genus will have to be placed in the curious intermediate family of *Gadopsidæ*. In the "Cat. Col. Museum," 1870, I recorded the occurrence of *Gadopsis marmoratus* in New Zealand, but it has dropped out of subsequent lists.

8b. *CHIRONEMUS FURGUSSONI*.

Haplodactylus fergussoni, Hector. "Trans. N.Z. Inst.," VII., p. 243.

Pl. VIII.

Native name—*Hiwi-hiwi*.

D. 14–1/17; P. 6/8; A. 3/6; L.L. 60; L.T. 11/16.

Pectoral fins elongate, acute, with six simple rays.

This species was described from a mutilated specimen, and I now find, from a well-preserved example, that the teeth do not form a distinct row of trenchant incisors in front, and that it must be referred to *Chironemus*.

Height of body is one-fourth the total length and five-sixths the length of the head; diameter of the eye equals the orbital interspace, and is one-fifth of the head and one-half the snout, which is pointed, with fleshy lips; gape extends to the vertical of anterior nostrils, which have a double fringe; form of body elongated, with convex profile, the orbital interspace being concave transversely; præoperculum rounded, entire; operculum with two blunt spines and sub-opercular flap; cheeks with small scattered scales imbedded in the skin, which is minutely punctate. The length of the pectoral, which is pointed, exceeds the height of the body, the lower rays being stout and flexible and free from the membrane; the first and fourteenth are very short, the fifth is longest, and is two-fifths the length of head; spinous and soft portions nearly equal.

Scales cycloid, the largest being half the diameter of the eye, those on the sides having a bright yellow spot in the centre of each; teeth strong, villiform, in broad triangular patches; vomerine teeth minute.

Body marked brown and yellow, like tortoise-shell; belly yellow; fins yellow, with dark bars.

							Inches.
Total length	...	...	...	...	...	...	9·5
Height of body	...	...	...	...	...	...	2·1
Length of head	...	...	...	...	...	...	2·6
Diameter of eye...	...	...	...	...	...	...	0·5
Length of pectoral	...	...	...	...	...	...	2·5

This fish is very nearly *C. marmoratus*, Günth., II., 76, but has a more elongate form and pointed pectoral fin. It differs from the fish referred by Captain Hutton to *C. georgianus*, Cuv., which has short pectorals with seven rays, and a short spinous dorsal.

Specimen in spirit presented to the Museum by Mr. W. T. L. Travers, F.L.S., from the Bay of Islands, where it is not uncommon at certain seasons.

6c. GIRELLA SIMPLEX, Rich.

“Voy. ‘*Ereb.*’ and ‘*Ter.*’” Fishes, p. 25. Günther, I. 429. *Girella percoides*, Hect. (“Trans. N.Z. Inst.,” Vol. VII., p. 243).

Pl. VIII., 6c.

A fresh specimen of the New Zealand Black Perch, caught near Wellington, enables me to give a better figure of the fish, which was formerly drawn from a badly-mounted specimen;* and a careful comparison of the fresh fish with the minute description given by Sir John Richardson leads me to abandon its specific distinctness from the fish of Sydney Harbour.

107a. MURÆNA KRULLII.

Pl. VIII.

Posterior nostrils not tubular; anterior nasal tubes minute. Teeth, uniserial, mandibles with twelve irregular-sized teeth on each side. Eight short teeth in a crowded row in front. Vomerine teeth few, but long. Tail portion of the body longest. Length of head to gill-opening contained $3\frac{1}{2}$ times in that of the trunk. Snout compressed, blunt. Fin only slightly elevated, not so high as length of snout. Very thick and fleshy, with a very narrow membranous margin, except near the extremity of the tail. Eye minute. Colour uniform dark brown, without any light patches or darker markings.

	Inches.
Total length	31·5
Snout to vent	15
„ „ dorsal fin	3
„ „ gill opening	3·7
Length of snout... ..	0·6
Length of gape	1·2
Diameter of eye	0·1

Specimen in spirit presented by Mr. W. T. L. Travers, F.L.S., caught in the Bay of Islands by a whaling vessel belonging to Mr. F. Krull, Cr.P., Consul for the German Empire, and to whom the species is dedicated.

138a. MYLIOBATIS TENUICAUDATUS.

Pl. X.

Tail shorter than the disc, very slender. Dorsal finlet commences before the posterior limit of the ventrals. Claspers extend to the caudal spine, which springs half the length of the dorsal, behind that fin, and is equal in length to its base. Body slopes gradually into the fin portion of the disc;

* *Loc. cit.*, Pl. VII.